## LAKE COUNTY COUNCIL OF MAYORS PROJECT SELECTION METHODOLOGY

### PURPOSE/OBJECTIVES

- 1. Provide all members of the Lake County Council of Mayors the possibility to participate in receiving Federal Transportation funds at some point in time by offering a variety of possible projects.
- 2. Reduce traffic congestion in Lake County by investing in the transportation system.
- 3. Maximize, as much as possible, the amount of Federal and other transportation funds being spent within Lake County.

### **PROJECT CATEGORIES**

Each transportation project is placed into one of eight (8) project category types as listed below. The Council's Federal funds (STP) are available for these categories. For some categories, Federal or State funds other than STP are seen as the primary source of funding.

### **Category Types**

- 1. <u>Air Quality</u> Transportation projects that promote air quality (intersection improvements, reduced vehicle miles of travel).
- 2. <u>Arterial Maintenance</u> Roadway reconstruction and resurfacing projects, not including add lane projects, on the arterial highway system.
- 3. <u>Bridge</u> Roadway bridge projects.
- 4. <u>Enhancement and Bikepath</u> Projects eligible for STP enhancement funds as specified in SAFETEA-LU and/or Illinois Department of Natural Resources bikepath funds.
- 5. <u>Local Assistance Maintenance</u> A minor roadway resurfacing for non-arterial roadways eligible for Federal funds.
- 6. <u>Multi-Modal</u> Non-highway transportation projects, including non-traditional and traditional transit.

- 7. <u>Safety</u> Transportation projects that improve traffic safety (intersection improvements, street lighting, etc.)
- 8. <u>Traffic Flow</u> Transportation projects that increase vehicle capacity (add lanes, left turn lanes, intersection improvements, etc.).

### PROJECT SELECTION FACTORS

Each category contains a list of project selection criteria used to prioritize transportation projects within that category. Below is the list of selection factors. Appendix A shows how the score for each factor is determined.

- 1. <u>Current V/C</u> Current Volume/Capacity of a roadway or intersection on a peak-hour basis.
- 2. <u>Emission Reduction</u> Estimated decrease in vehicle emissions resulting from the project (using CATS formula and data) by increasing traffic speed or decreasing vehicle miles of travel.
- 3. <u>Fund Source Criteria</u> CMAP/IDOT methodology used to prioritize and select which proposed transportation projects are to receive funding from various federal funding sources.
- 4. Road Condition Condition of the roadway surface (CRS rating).

### PRIMARY FUNDING SOURCE

Each category has a primary source of Federal or other funding for transportation projects listed in that category. The following is a list of funding sources.

### Name

### Abbreviation

1.	Congestion Mitigation and Air Quality	CMAQ
2.	Federal Highway Bridge Replacement and Rehabilitation Program	HBRRP
3.	ICC Grade Crossing	ICC
4.	Illinois Department of Natural Resources	IDNR
5.	IDOT Major Bridge Program	MBP

6.	IDOT Truck Route: 80,000 lb. Truck Route Program	TARP
7.	Operation Green Light Transit	OGLT
8.	Surface Transportation Program	STP
9.	STP Enhancement	STP/E
10.	STP Rail Grade Crossing	STP/R
11.	STP Safety	STP/S

### ROAD NETWORK

Roadway/Intersection transportation projects must be contained in one of the two roadway networks listed below to be eligible for Federal funds.

<u>Minor Arterials</u> - Major, non-State, roadways as specified on the functional classification map.

<u>Collectors</u> – Minor roadways as specified on the functional classification map.

The following table outlines the project categories previously described and the project selection factors, funding split, funding source, and road network used for each project category.

### CATEGORY FUNDING ALLOCATION AND PROJECT SELECTION

### CATEGORY

	Local Assistance Maintenance (2) (3)	Arterial <u>Maintenance</u> (5)	Traffic <u>Flow (5)</u> (6)	Multi-Modal (6)	Air Quality (6)	Enhancements and Bikepath (6)	<u>Bridges</u>	<u>Safety</u>
Normal STP Funding Allocation	7%	35%-45%	48%-58%	CSPL	CSPL	CSPL	CSPL	CSPL
Selection Factors (w/in category) - Current V/C - Emission Reduction (CATS)			Х	X	X			
- Fund Source Criteria - Road Condition	X	X			X	Х	Х	Х
Primary Funding Source	STP	STP	STP	PACE (4) METRA (4) RTA (4)	CMAQ	STP/E	HBRRP	STP/S
Secondary Funding Source	NA	TARP	CMAQ	OGLT CMAQ	NA	IDNR CMAQ	MBP	ICC
Road Network - Arterial - Collector	NA X	X (1) X	X (1) X	NA NA	X X	NA NA	X X	X X

- NOTES: (1) Receives Projects Programmed Project Must be **Project Must** (2) (4) Requires Local Yearly. Project Maximum Able To Be Commence Within **Bonus Points** Sponsor \$60,000 (Fed). Annual Cost Completed In The The Fiscal Year That of all Projects Is Not To Fiscal Year It Is Programmed. Exceed \$200,000 (Fed).
- (6) Projects that include a TCM (See Appendix B) will receive bonus points as indicated in Appendix A.
- CSPL If a project cannot be funded by the primary or secondary funding source then it is placed on the combined supplemental project list for review after the analysis of projects submitted under the normal STP allocation.

70% Federal/30% Local STP Funding Match

No Funding of Phase I or II Engineering

Local Govt. Resolution Committing Funding for Local Match Required.

Projects Should Have a Reasonable Cost Estimate

### **APPENDIX A**

# PROJECT SELECTION METHODOLOGY SELECTION FACTORS

Contor			<u>POINTS</u>				
<u>Factor</u>	<u>Standard</u>	Bonus <u>Arterial</u>	Bonus <u>TCM</u>	<u>Bonus</u> Arterial +TCM			
1. Current V/C*	<u>standard</u>	Atterial	<u>ICIVI</u>	<u>Artenai +TCIVI</u>			
0.00 - 0.34 0.35 - 0.49 0.50 - 0.64 0.65 - 0.79 0.80 - 0.94 0.95 +	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6	2 3 4 5 6 7			
2. Emission Reduction							
Based on CMAP transportation project emission reduction data and formula.	TO	TO BE DETERMINED I					
3. Fund Source Criteria Based on CMAP/IDOT project selection methodology for a particular federal funding category (ex., Congestion Mitigation and Air Quality (CMAQ), STP Enhancement, Highway Bridge Replacement and Rehabilitation (HBRRP).	TO	BE	DE	TERMINED			
4. Road Condition (CRS Rating) **							
1.0 - 2.9 $3.0 - 3.9$ $4.0 - 4.9$ $5.0 - 5.9$ $6.0 - 6.9$ $7.0 - 9.0$	5 4 3 2 1 0	6 5 4 3 2 1	6 5 4 3 2	7 6 5 4 3 2			

Notes: A project with a point total of six (6) would rank higher in funding priority over a project with a point total of four (4).

<sup>\* -</sup> defined by the Transportation Research Board Highway Capacity Manual

<sup>\*\* -</sup> defined by the IDOT Roadway Condition Rating Survey (CRS) Manual

### **APPENDIX B**

### LIST OF TRANSPORTATION CONTROL MEASURES (TCM)

### Possible TCM's include:

- 1. Public transportation
- 2. Parking & driving restrictions
- 3. Ride sharing (car and van pools)
- 4. Congestion pricing
- 5. Flexible work hours
- 6. Telecommuting
- 7. Parking fees
- 8. Traffic flow improvements
- 9. Regional motor fuel tax
- 10. Improved pedestrian and bike access
- 11. Land use coordination
- 12. High occupancy vehicle (HOV) lanes

## Lake County Council of Mayors STP Project Scoping/Field Review Report

PART I. OV	/ED\/IE\/										
PART I. UV	CRVIEVV									T	
COMMON ROUTE							_		AA DIZING.		
NAME:							- 1	OUTER	MARKING:	<u> </u>	
LIMITS	From:					To	).				
FEDERAL LOGICAL						T-					
TERMINI:	From:					To	FIEL	D			
LENGTH:			COUNTY:					IEW DA	TE:		
FIELD REVIEW PARTICIPANTS:											
JURISDICTIONS INVOLVED:											
JURISDICTIONS INVOLVED:											
úi		Name			Ti	tle/of				Phone/fa	X
KEY PEOPLE:											
, PE(											
KEY											
·				Assigne	d Local	Roads	Engin	eer			
PART II. GENERAL SCOPE OF WORK (detailed description – pages 9 and 10)											
PART II. GI			E OF WOR	イハ (detaile	ed descript	ion – pa					
	Resurfacing					<u> </u>	Lightii				
	Widen & Re					<u> </u>	Pre-en	•			
00005.05	Reconstruct			<u> </u>		Signal					
SCOPE OF WORK	Add Lanes			<u> </u>		nizatio					
WORK	New Roadw			<u> </u>	TCM Type Project						
	Intersection	Improve	ement				Bridge	!			
BRIEFLY											
DESCRIBE SCOPE/											
PURPOSE OF											
PROJECT											
	3R				Catego				Environi	nental	
	JK .	Ш	POTENT	TAL.	Exclus		pe 1			nent (EA)	$\perp$
DESIGN	FAPLHI		TYPE C	)F	Catego	rical			Environ	nental Statement	
GUIL DELINES   —   ENVIRONMENTAL		Exclus		pe 2		(EIS)	Jalenieni				
	BDE		REPOR	<i>( )</i>				s of Ac	ction (ECA	(D)	П
							5100			endar	$\vdash$
	Phase III					RO'	W	Yes		endar ir of	
ESTIMATED	Construction En	gineering	\$				ded?	No		struction	
COSTS	Estimated To	otal									
	Construction		\$			Mor	nths to	Compl	ete		
	*D==i==+====		ttook octionate	of oc-t-		ال مريد	:4 a .a				
	Project spor	Project sponsor to attach estimate of costs for major work items									

PA	RT III. EX	RT III. EXISTING CONDITIONS															
	EMENT ID./CRS:		No Year			CRS	CRS Rating: Not			lotes:							
CLE RES	TICAL ARNANCE TRICTIONS ing profile/overh tures)																
	STREET KING			No□					One S	Side 🗌	]			Bot	h S	ides	]
HOF	RIZONTAL																
ROW	TRICTIONS //curb & r/sidewalks																
/build	lings																
	JSUAL SOIL		Wetlands: yes No				Dry Land Bridge					es: yes No			Bogs: yes□ No□		
CON	IDITIONS		(	Cattails	in Ditches	□ Nol				Соі	ntamir	nated S	oil: y	es[	] No		
	LITIES IN POSED RO	۱۸/	Electrical: yes No				initary Sewer:	yes□ No □	Т	elepho	one:	yes[ No [		Wa	ter:	yes No	
	EASEMEN			Gas:	yes⊟ No □	Pipe	elines:	yes No 🗌	Ca	able/Fi	iber:	yes[ No [		Oth	ner:	yes No	
TRA	FFIC DATA		ADT	:		Vļ	od	SU:				%	MU: %				
NON	N- TICIPATING																
ITEN																	
OTH SAFE CON		S															
POSTED SPEED			mph			GUAR	DRAIL	: yes	No [		RE	TAINI	NG WA	ALL:	ye	s l	No 🗌
DRAINAGE DATA				(compl	lete for eac	h draina	ge basii	n)						I			
#			ation:					Existing Drainage Type									
#			ation:								ing Dra					Rui	
#		Loca	ation:							Exist	ing Dra	ainage	Type:	Ur	ban	∏Rui	al 📙

PART	III. EXISTING CONDITION	VS – Continued (Copy as needed and label 3a, 3b)
NUMBE STRUC	R OF FURES INVOLVED: (Incl	lude nearby structures that may be impacted) out below or attach master structure report from IDOT for each)
Structure	e: # Location:	
a.	Waterway or facility crossed:	
b.	Roadway width (face of curb to face of curb):	
C.	Structure width (outside of parapet to outside of parapet):	& Structure length:
d.	Structure jurisdiction, if other than project sponsor:	
e.	Structure type (concrete, steel or timber):	
f.	Most current deficiency rating	
g.	IL Department of Natural Resources (IDNR) permits	Yes No
h.	Approach conditions (# lanes, s/w, C&G,etc.?)	
Structure	e: # Location:	
a.	Waterway or facility crossed:	
b.	Roadway width (face of curb to face of curb):	
C.	Structure width (outside of parapet to outside of parapet):	& Structure length:
d.	Structure jurisdiction, if other than project sponsor:	
e.	Structure type (concrete, steel or timber):	
f.	Most current deficiency rating	
g.	IL Department of Natural Resourced (IDNR) permits	Yes No
h.	Approach conditions (# lanes, s/w, C&G,etc.?)	

PART	PART III. EXISTING CONDITIONS - Continued (Copy as needed and label 4a, 4b)									
	NUMBER OF IZED INTERSECTIONS	:	(com	(complete for each signalized intersection)						
	ed Intersection: #	Location	on:							
	Existing Conditions (geo	ometrics, laneage, tu	rning radii, etc) A	ttach plan sheet, intersection condi	tion diagram or sketch, if available					
a.										
b.	Pedestrian signals:	Yes No	Locations:							
C.	Existing sidewalks:	Yes No	Locations:							
d.	Pre-emption (railroad-fire-emergency- transit)	Yes No	Locations:							
	Is this intersection part If Yes, Fiber Optic?	of a current or fu	uture signal int	erconnect system?	Yes No Yes No					
e.	If Yes, give limits									
	If Yes, give jurisdictions	s involved								
f.	Operational deficiencie	s								
	Unusual circumstances	s and additional								
g.	discussion									

PA	ART III. EXISTING CONDI	TIC	NS - Con	tinued (Copy as neded and label 5a, 5b)
	TAL NUMBER OF SIGNALIZED INTERSECTION			(complete for each unsignalized intersection needing update) (such as turn lanes, updated traffic control, etc.)
Un	signalized Intersection:	#	Location:	
a.	Traffic Control (4 way stop, 2 way stop, yield, other) Warranted?	Ye	s No	
b.	Lane Configuration (all approaches)			
c.	Other Conditions:			
d.	Location sketch attached:	Ye	s No	
e.	Special Problems:			
Un	signalized Intersection:	#	Location:	
а.	Traffic Control (4 way stop, 2 way stop, yield, other) Warranted?		s No	
b.	Lane Configuration (all approaches)			
c.	Other Conditions:			
d.	Location sketch attached:	Ye	s No	
e.	Special Problems:			

PA	PART III. EXISTING CONDITIONS - Continued (Copy as needed and label 6a, 6b)													
		MBER OF			(complete for each railroad involved)									
Railr	oad:	#	Loca	tion:										
a.	Name	of railroa	d cros	ssed:										
b.	Existin (timber,	g type of	cross concre	sing: ete, asp	halt, (	other)								<u>.</u>
C.	Total #	f of track	s.			Num	ber (	of active tracks:			Numbe	er of abandoned	tracks:	
0.	Total II					Num	ber (	of mainline track	s:		Numbe	er of secondary o	or spur tracks	:
d.	Width	of crossii	ng:			Feet	□ N	∕leters□						
	Othor	a a a aliti a a												
e.	Other	condition	S.											
f.	Type of Protection Devices: (gates, flashing lights, bells, cross bucks only, other):													
	Accom	modatio	n for p	edest	rians	s and I	oicyc	clists crossing the	e railı	oad tra	cks?	Yes□ No□		
g.	Descri	be:												
		tion devi			bike									
h.	Is/are	there sig	nalize	d inter	sect	ion(s)	with	in 2000 ft. of the	RR (	crossin	g?	Yes□ No□	If yes, #	
	Is/are	there rail	roads	imme	diate	ely adj	acer	nt to the project,	but n	ot cross	sed?	Yes□ No□	If yes, #	
i.	Name(	(s):												
	Descri	ption:												
Addi	tional D	iscussior	า:											

**Lake County Watershed Development Ordinance** Permit required for modifying a watercourse draining 20 or more acres. (including culvert Yes No replacement) Yes□ Permit required for any part of improvement that is in floodplain. (all floodplain with a tributary area No >100 acres and 100 year flood frequency) Yes□ Permit required for increase in impervious area of 1 acre for intersections and 1.5 acre/mile for No continuous road projects If Yes to any of the above then: Application Data required by LCSMC (For Information Purposes Only) A copy of IDOT-DWR permit application. (May be required) A copy of the proposed storm water management system showing the location and size of all existing and proposed drainage improvements including plan, profile and cross sections. If in floodplain include 100 year 2. base flood elevation on plan and profile. 3. A copy of all calculations supporting the storm water management plan. 4. A soil and sedimentation control plan. Yes Disturbs a cumulative total of 1 acre or more of wetlands No If Yes to the above then: Application Data required by LCSMC (For Information Purposes Only) Wetland Determination Report Wetland Use Documentation

### **Design Requirements – Storm water Calculations and General Requirements**

Drainage area >100 acres or for detention requirements, require hydrograph producing method.
 Drainage area <100 acres, rational method is acceptable.</li>
 Bulletin 70 rainfall data is required.
 Calculations on tributary land is based on the greater or future or existing runoff conditions.
 Storm water detention storage requirements shall be in addition to any existing storage.
 Buffers shall be provided adjacent to all channels and open bodies of water as well as wetlands of exceptional value.

2.

3.

Determine if project is water dependent

Appropriate use of wetlands for detention

Selection & justification of appropriate mitigation

Minimization of impacts

### Design Requirements - Release Rates and Discharge

Aerial photo with delineated wetlands

ACOE data sheets with color photos

Map showing location of wetland w/developmnt boundary

Written description of wetland functional classification

1. A release rate of no more than 0.04 cfs/acre for a 2 year storm and nor more than 0.15 cfs/acre for a 100 year storm for the added impervious area for widening & resurface project and for all disturbed areas for new construction. 2. Drainage system must outlet into a well defined receiving channel with adequate capacity. 3. Overland flow path to be designed for 100 year flow. 4. Drainage system not to result in interbasin flow. 5. Discharge into wetlands, existing lakes and ponds due to a new development shall have the initial ½" of runoff detailed immediately before discharge into the lake, stream or wetland. 6. Storm water discharges shall discharge into a buffer area before entering a waterway, wherever possible.

### **Design Requirements – Detention**

1.

2.

3.

1. Provide all detention/retention/infiltration facilities with an overflow capacity for a 100 year storm. 2. Minimum outlet pipe size shall be a 12" dia. With a restrictor as required. 3. Detention facilities shall not be built in a regulatory floodplain.

### **Design Requirements – Floodplain Development**

1. Provide compensatory storage at the rate of 1.2:1 for riverine floodplain and at the rate of 1:1 for non-riverine floodplain. 2. Bridge and culvert modification (a) maximum created head – 0.1' (b) control velocities from scour, erosion and sedimentation.

### Design Requirements - Soil Erosion and Sediment Control

Protect properties and waterways from erosion.
 Soil and erosion control measures to be in place before any earthwork begins.
 Permanent or temporary soil stabilization to be applied within 15 days of final grading.
 Areas draining <1 acre shall be protected by filter fabric (i.e. filter fence and straw bales), with drainage areas between 1 & 5 acres a sediment trap or equal shall be used, and for drainage areas over 5 acres a sedimentation basin shall be used to control erosion.</li>
 Maximum embankment slope – 3:1.
 All storm sewers operating during construction shall be filtered.
 All temporary sediment and erosion control measures shall be removed within 30 days of site stabilization.
 A stabilized mat shall be placed at all construction access points.

### **Design Requirements – Wetland Mitigation**

1. Use measures to maintain or improve wetland functions. 2. Mitigate on site where possible. 3. Provide mitigation through restoration, enhancement, creation or contribution at a minimum ratio of 1:1.

PAI	RT IV. ENVIRO	NMENTAL AN	D SPECIAL	DA	TA						
	Documented (IDNR)	or Possible Wetland	ds:	Yes	Yes No						
a.	Location(s):										
	Public Parks or Fore	est Preserve:		Yes	☐ No☐						
b.	Location(s)										
D.											
	4 (f) Involvement (de										
	Cultural Resource In	nvolvement			Descripti	ion/location(	s)				
	Historic district:		Yes No								
C.	Historic structure		Yes No								
	Historic markers	Yes No									
	Other eligible his	Yes No									
	Other cultural re		Yes No								
	Land uses adjacent	to proposed project:									
d.	Industrial		Yes No		Office		Yes No				
u.	Residential		Yes No		Schools		Yes No				
	Institutional		Yes No		Park or Forest		Yes No				
	Commercial Hazardous Materials	CAUCT LUCT other ller	Yes No		Cemeteries		Yes No				
e.	Sites):	S (UST, LUST, Other Haza	ardous waste	Yes	☐ No☐						
	Description/location	(s)									
f.	Potential Contamina	ited Soils									
	Description/location(	(s)									
	Local Acceptability (	A federally accepted publ	ic involvement progra	ım will l	be required during project de	velopment):					
	Is there local public	support, generally		Yes	☐ No☐ Do not know	,					
g.	Has the affected put	olic been involved/inf	formed?	Yes	☐ No☐						
	How?										
	,										
	Unusual Circumstan	ICES: (examples: decorat	tive features/political	sensitiv	rities)						
h.											

PA	RT V. PROPOSED	SCOPE	OF WORK (Detailed	l Descri <sub>l</sub>	otion)
	Proposed Roadway Cros	s Section(s)	:		
	Number of through lanes:	:	If open drainage, shoulder width:		If closed drainage, parkway width:
a.	Median: None Ra	aised⊡ Flu	ush Mixed		
	Additional Description:				
	Intersection Improvement	ts:	Yes No	If yes, N	umber:
b.	Additional Description:				
٠.					
			T		
	New Traffic Signal Location	on(s):	Yes No	If yes, N	umber:
C.	Additional Description:				
	Traffic Signal Modernizat	ion	T		
	Location(s):	1011	Yes No	If yes, N	umber:
d.	Additional Description:				
	Signals to be Interconnect	ted:	Yes No	If yes, N	umber:
e.	Additional Description:				
	Ct. at well become a star		Yes No	16 N	
	Structural Improvements: Additional Description:		res No	If yes, N	umber.
f.	Additional Description.				
	Pedestrian/Bicycle Accon	nmodations:		Yes 1	No l
	Additional Description:				
g.					
L	Street Lighting:	Rehabilitat	tion Yes No	New	Installation Yes No
h.	Additional Description:			•	

PA	RT V. PRO	POSED	sco	PE OF	WOR	K (Co	ontinued	)					
i.	Roadside Improvements (retaining walls, positive barriers, etc)						Yes No						
	Detailed Description:												
j.	Landscaping: Yes No		No□	Detailed Descrip			ption:						
k.	Right of Way r	needed:	Yes[	☐ No☐	Es	timated	d Acreage:			Numbe	er of Parcels:		
	Describe any anticipated ramifications: (such as tree removal, etc).												
	,												
	Railroad Grade Crossing Improvements: Yes[					☐ No☐ If yes, Number:			er:				
	Detailed Description:												
m.	Drainage: Urban (enclosed)					Rural (open)							
	Is detention re	s detention required?		☐ No☐	(if yes,	res, check type)			etention ba	asin 🗌	Detention offsite		
	In line detention New outlets Where?												
	Detailed Description:												
n.	Sanitary Sewer:		Yes	Yes No			Permit Re	quire	ired: Yes[		☐ No☐		
	Water main:		Yes	Yes□ No□			Permit Re	quire	uired: Yes		s No		
	Additional Improvements:												

## Lake County Council of Mayors Funding Parameters for STP Projects

	F	Match Ratio					
ROW	E 1	E 2	E 3	TCM*	LAPP**	Construction	TCM
NO	NO	NO	YES	YES	NO	70/30	70/30

<sup>\*</sup> Transportation Control Measure

The project sponsor may request the participation of IDOT-Bureau of Local Roads and Streets staff in the scoping process. Such a request shall be made through the Council Liaison.

<sup>\*\*</sup> Local Agency Pavement Preservation Policy